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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,134	02/11/2004	Kuo-Yu Tang	LIE 183	2427

7590 12/16/2004

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EXAMINER
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MORGAN, EILEEN P

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/775,134

Applicant(s)

TANG ET AL.

Examiner

Eileen P Morgan

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-11 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 recites a wafer grinder with a holding body 'positioned on the wafer grinder.' How does the wafer grinder comprise an element that is positioned upon itself? The phrase 'longitudinal rotation' is unclear.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, recites a wafer grinder with a holding body 'positioned on the wafer grinder.' How does the wafer grinder comprise an element that is positioned upon itself? Is the holding body and wafer holding sub-module the same? Line 2, 'and fixedly' refers to what? The housing or holding body? Is this element part of the grinder or positioned on the grinder? Is the recited wafer grinder the actual grinding tool or the overall apparatus? What is grinding during the 'grinding process?' How is the spindle 'positioned on the grinder'? Is the worktable the polishing pad holder or wafer holder? The claims are an aggregation of elements not structurally related to one another. It is totally unclear how the elements structurally correspond and function as a unit. It is unclear what the function of the piezoelectric actuator and displacement meter is. How is the air padding provided to offset the lateral force? Lateral force of what? The phrase 'longitudinal rotation' is unclear.

Claim 2, where is the auxiliary groove located on the holding body? How does it facilitate machining? Is the airflow hose the workpiece?

Claim 3, what is a conventional civil structure? How does this perform for 'setting up a machine?' What does this mean?

Claim 4, what has a vacuum nozzle and pump hose, the work table module or sub-module. Again reference to all these listed 'modules', 'sub-modules', 'body's' are unclear and unrelated.

Claim 6 is unclear. What is an 'adjustment sub-module'? How does this 'block longitudinally the nozzle?' What and how is this adjusting?

Claim 7, what is the 'same geometrical position'?

Claim 8, actuator and meter needs to be pluralized. Are there three pairs of each or just the actuators? What is a 'same separation'? How does this 'adjust'?

Claim 9, 'belt-like' is indefinite. 'shock' of what?

Claim 10, what is the coupling 'coupling'? How is motor power delivered by a belt?

Claim 11, 'the disc spring' lacks antecedence. How is the pre-compressive force generated?

### **Claim Rejections - 35 USC § 102**

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-11, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Honda-5,816,895.


Honda discloses a wafer grinder with a rotary worktable within a housing module, with an air pressure spindle and piezoelectric actuator to adjust the direction and tilt of the grinding wheel spindle to produce flat wafers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eileen P Morgan whose telephone number is 571.272.4488. The examiner can normally be reached on Tuesday-Thursday (Office), Friday (Work at home).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571.272.4485. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EM  
December 13, 2004



EILEEN P. MORGAN  
PRIMARY EXAMINER